

MAIL TO:

STATE OF UTAH
DIVISION OF PURCHASING
3150 STATE OFFICE BUILDING, CAPITOL HILL
P.O. BOX 141061
SALT LAKE CITY, UTAH 84114-1061
TELEPHONE (801) 538-3026
FAX (801) 538-3882
<http://purchasing.utah.gov>

Request for QuotationSolicitation Number: **FV5066**Due Date: **12/09/2004**

Date Sent: November 29, 2004

Goods and services to be purchased: **HI RESOLUTION SONAR SYSTEM FOR SEARCH AND RECOVERY****Please complete**

Company Name		Federal Tax Identification Number	
Ordering Address	City	State	Zip Code
Remittance Address (if different from ordering address)	City	State	Zip Code
Type <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Proprietorship <input type="checkbox"/> Government	Company Contact Person		
Telephone Number (include area code)	Fax Number (include area code)		
Company's Internet Web Address	Email Address		
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered)	Days Required for Delivery After Receipt of Order (see attached for any required minimums)		

The following documents are included in this solicitation: Solicitation forms, instructions and general provisions, and specifications. Please review all documents carefully before completing.

The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in Utah. Yes ____ No _____. If no, enter where produced, etc. _____

Offeror's Authorized Representative's Signature	Date
Type or Print Name	Position or Title

**STATE OF UTAH
DIVISION OF PURCHASING &
GENERAL SERVICES**

Request for Quotation

Solicitation Number: FV5066

Due Date: 12/09/2004

Vendor Name:

THE UTAH DEPARTMENT OF PUBLIC SAFETY, DIVISION OF EMERGENCY SERVICES AND HOMELAND SECURITY IS PURCHASING HI-RESOLUTION SONAR SYSTEM FOR SEARCH AND RECOVERY.

Item#	Qty	Unit	Description	Unit Price	Extension
001	1	EA	HI RESOLUTION SONAR SYSTEM FOR SEARCH AND RECOVERY	\$	\$
002	1	EA	300 FOOT KEVLAR CABLE WITH TERMINATIONS	\$	\$
003	1	EA	GIMBAL DEPLOYMENT TRIPOD	\$	\$

ALL ABOVE PER ATTACHED SPECIFICATIONS.

FOR ADDITIONAL INFORMATION OR CLARIFICATION CONTACT DENISE SPILLMAN AT 801-538-3798.
FOR QUESTIONS REGARDING PURCHASING CONTACT FRANK VOLK AT 801-538-3707.

Changes or modifications to this bid:

Any changes or modifications to this solicitation will only be accomplished in written addendum sent from the division of purchasing.
Any other form is not binding. Bidders submitting a bid on any information other than which is contained in this solicitation document, or any addendum thereto, do so at their own risk.

Ship To: UTAH HIGHWAY PATROL
10420 NORTH JORDANELLE BLVD.
HEBER CITY, UT 84032

FREIGHT CHARGES

SHIPPING POINT AND ZIP CODE	
SHIPPING WEIGHT	
MODE OF TRANSPORTATION (Please check one) <input type="checkbox"/> Small package/Ground <input type="checkbox"/> LTL(Less than truck load) <input type="checkbox"/> Truckload <input type="checkbox"/> Air <input type="checkbox"/> Other (Please specify) NMFC Class # _____ NMFC Item # _____	
TOTAL PRICE LESS FREIGHT (FOB Origin)	\$
TOTAL PRICE INCLUDING FREIGHT (FOB Destination)	\$

REQUEST FOR QUOTATION - INSTRUCTIONS AND GENERAL PROVISIONS

1. QUOTATION PREPARATION: (a) All prices and notations must be in ink or typewritten. (b) Price each item separately. Unit price shall be shown and a total price shall be entered for each item bid. Errors may be crossed out and corrections printed in ink or typewritten adjacent and must be initialed in ink by person signing quotation. (c) Unit price will govern, if there is an error in the extension. (d) Delivery time is critical and must be adhered to as specified. (e) Wherever in this document an item is defined by using a trade name of a manufacturer and/or model number, it is intended that the words, "or equivalent" apply. "Or equivalent" means any other brand that is equal in use, quality, economy and performance to the brand listed as determined by the Division of Purchasing & General Services (DIVISION). If the vendor lists a trade name and/or catalog number in the bid, the DIVISION will assume the item meets the specifications unless the quote clearly states it is an alternate, and describes specifically how it differs from the item specified. All quotes must include complete manufacturer's descriptive literature if quoting an equivalent product. All products are to be of new, unused condition, unless otherwise requested in this solicitation. (f) By signing the quotation the vendor certifies that all of the information provided is accurate, that they are willing and able to furnish the item(s) specified, and that prices quoted are correct. (g) This quote may not be withdrawn for a period of 60 days from quote due date. (h) Incomplete quotes may be rejected.

2. SUBMITTING THE QUOTATION: (a) The quote must be signed in ink and returned to the DIVISION OF PURCHASING, 3150 State Office Building, Capitol Hill, Salt Lake City, UT 84114-1061 or faxed to (801) 538-3882 by the due date and time. **The "Solicitation Number" and "Due Date" must appear on the outside of the envelope or on the fax cover page.** (b) The state will consider faxed quotes. Faxed quotes are submitted at the sole option and risk of the vendor and must be responsive to all conditions and specifications included in the Request for Quotation (RFQ). Access to state facsimile machine is on a "first come first served" basis and the state does not guarantee the vendor's access to the machine at any particular time. (c) All prices quoted must be both F.O.B. Origin and F.O.B. Destination. Additional charges including but not limited to delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose must be included in the quotation for consideration and approval by the DIVISION. Upon award of the contract, the shipping terms will be F.O.B. Destination, Freight Prepaid with freight charges to be added to the invoice unless otherwise specified by the DIVISION.

3. SOLICITATION AMENDMENTS: All changes to this solicitation will be made through written addendum only. Bidders are cautioned not to consider verbal modifications.

4. PROPRIETARY INFORMATION: Suppliers are required to mark any specific information contained in their quote which is not to be disclosed to the public or used for purposes other than the evaluation of the quote. Each request for non-disclosure must be accompanied by a specific justification explaining why the information is to be protected. Pricing and service elements of any quote will not be considered proprietary. All material becomes the property of the state and may be returned only at the state's option. Quotes submitted may be reviewed and evaluated by any persons at the discretion of the state.

5. SAMPLES: Samples of item(s) specified in the RFQ, when required by DIVISION, must be furnished free of charge to DIVISION. Any items not destroyed by tests may, upon request made at the time the sample is furnished, be returned at the vendor's expense.

6. WARRANTY: The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah applies to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements,

(3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

7. DIVISION APPROVAL: Purchase Orders placed, or contracts written, with the State of Utah, as a result of this RFQ, will not be legally binding without the appropriate signature of the DIVISION.

8. AWARD OF CONTRACT: (a) **This is an informal quotation which will not be read at a public opening;** however, the information may be publicly reviewed after award. To obtain a copy of this record (tabulation) you may either enclose a stamped self-addressed envelope, or review tabulation in our office. (b) The contract will be awarded with reasonable promptness, by written notice to the lowest responsible vendor that meets the specifications. Consideration will be given to the quality of the product(s) to be supplied, conformity to the specifications, the purpose for which required, delivery time required, discount terms and other criteria set forth in this request for quotation. (c) The DIVISION may accept any item or group of items, or overall low quote. (d) The DIVISION has the right to cancel this request for quotation at any time prior to the award of contract. (e) The DIVISION can reject any and all quotes or waive any informality, or technicality in any quote received, if the DIVISION believes it would serve the best interest of the State. (f) Before, or after, the award of a contract the DIVISION has the right to inspect the vendor's premises and all business records to determine the holder's ability to meet contract requirements. (g) Estimated quantities are for quoting purposes only, and not to be interpreted as a guarantee to purchase any amount. (h) Utah has a reciprocal preference law which will be applied against vendors quoting products or services produced in states which discriminate against Utah products. For details see Section 63-56 20.5 -20.6, Utah Code Annotated. (i) Multiple contracts may be awarded if the State determines it would be in its best interest.

9. ANTI-DISCRIMINATION ACT: The vendor agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A. 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973, or the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disabilities. Also vendor agrees to abide by Utah's Executive Order, dated March 17, 1993, which prohibits sexual harassment in the workplace. Vendor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.

10. DEBARMENT: The CONTRACTOR certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the CONTRACTOR cannot certify this statement, attach a written explanation for review by the STATE.

11. GOVERNING LAWS AND REGULATIONS: All state purchases are subject to the Utah Procurement Code, Title 63 Chapter 56 U.C.A. 1953, as amended, and the Procurement Regulations as adopted by the Utah State Procurement Policy Board. These are available on the Internet at www.purchasing.utah.gov

(Revision 14 Mar 2003 - RFQ Instructions)

Specifications for RX 180 52000000037

Hi Resolution Sonar System for Search and Recovery
Kongsberg Maritime or (Equivalent)
Product Parts Numbers and Specifications listed below.

Sector Scan (Drop Mount):

*Software program must be able to be used on any standard PC and be the base for a full-function sonar processor without the need for additional boards or hardware and must be designed under the ISO standards to ensure compliance to reliability, statutory and regulatory requirements.

*System applications must be Windows-based and configured to control the scanning sonar and altimeter products via industry-standard telemetry protocols.

*Simultaneous multiple scanning sonar head and altimeter operation, and sensor configurations

*Time-tagged recording of all sonar and sensor inputs to the PC's hard-drive or external recording device

*Advanced target measurement and annotation tools

* Track Plotter module allowing the user to pre-plot search and survey lines, and to geo-reference sonar targets.

*Ping synchronization for multiple-head operation; fused data display for dual head profiling

*Post-processing capability for profile data

*Data mosaicking.

Technical Specifications:

Software:

MS1000 Software Based Sonar

Part number 901-10010000

Minimum System 600 MHZ, Pentium 3, 128 Mb of RAM

Requirements (single head operation), Windows 95/98/2000/NT/XP: Windows 2000/NT or XP

Video Format Platform dependent; SXGA (1280x1024 or higher)

Image Dedicated image area for each sonar head; size/position
configurable

Palette Menu selectable

Sonar Control Pull-down menus for configuring and control of sonar system

Status Readout Alphanumeric display of cursor positions, range, gain, mode
settings

Sensor Readout Alphanumeric display of position data, sensor outputs

Gain Menu adjustable; infinite settings

Range Menu adjustable; customer-defined; 5–500 meters

Sector Width Adjustable from 7.2° to 360° in 7.2° steps

Sector Center Adjustable from 0-360° in 0.9° steps

Cursors Selectable by pointing device; 2 general purpose

Zoom x2, x4

Magnifier x1 to x10

Menu Controls Menu driven control system for display mode, scan speed, scan reverse, threshold, speed of sound, serial I/O, profile or image selection, baud rate selection

Data Recording Imaging, profile and time-tagged sensor and Playback data storage to hard drive or other PC device; bitmap snapshots to disk

Measurement Tools Detailed annotation, cursors, tape measure, target area, target height

Printer Output to any printer recognized by operating system

Telemetry RS 232, RS 485, RS 422

Telemetry Rates Down link: 9600Uplink selectable: 9600, 19K, 38K, 57K, 115K bit/s

Power Requirement Platform dependent

Temperature Range Platform dependent

Navigation Input NMEA 0183 Format (232 Levels)

Sensor Interface RS232

Optional Serial Converter and Power Supply PC

Interface Specifications:

MS1000 Interface Unit

56Vdc Power Supply

RS485 to RS232 Converter

Part number 901-60070000

The Interface Unit must provide an isolated interface between the serial port of a desktop or laptop PC running the software processor and RS485 digital telemetry sonar heads. Depending on the head type and interconnect cable length, the head must have the capability of being connected to one of the two output connectors as follows:

For operation over cables up to 100m, the output connector providing the low supply voltage should be used. This output should be compatible with all the digital telemetry heads.

For operation over cables up to 1000m, the output connector providing the high supply voltage should be used. This output should have a warning label regarding the head voltage rating and must compatible only with the high-resolution heads.

Input Voltage 95 to 260 VAC / 47 to 63 Hz

Output Voltage 1 28VDC @ 2A

Output Voltage 2 56VDC @ 2A

PC Telemetry Interface RS232

Head Telemetry Interface RS485

Downlink Data Rate 9600 bps

Uplink Data Rate up to 115000 bps

LED Indicators Power, Tx, Rx

Temperature Range 0° to 40°C operating

0° to 50°C storage

Dimensions Height 3.08"/79mm

Width 12.20"/310mm (excluding mounting brackets)

Depth 11.00"/280mm (excluding connectors)

Weight: 6.5 lbs/2.9 kg

3000 m "High Resolution"
Geared Sonar Head
Digital Telemetry with Compass:
Part number 974-23130000

This version must be specifically designed to produce the highest resolution scanning sonar images possible with 675 kHz. Its design is targeted at bottom clearance, body recovery, underwater construction and applications where data clarity supercedes any other requirement. This sonar head should also be considered in conditions where the in-water temperatures are lower than 4° C, or higher than 20° C. Domed, oil-filled heads may acoustically defocus beyond these temperature ranges. This sonar head must incorporate the electronic advantages in increased sampling rates, wider receiver bandwidth, increased power output, and a very narrow horizontal beam pattern with the fan transducer. The telemetry must be RS 485 and RS 232 compatible, and is automatically sensed and configured. The transducer must be of a bare-shaft design, but the motor-end will be oil compensated to prevent water ingress into the main electronic stack via the transducer shaft.

The sonar head must be compatible with the MS1000 and MS900D Surface Processors. To take full advantage of the advanced features and high resolution this head has to be operated with the MS1000 processor.

Operating Frequency 675 kHz
Beam Width 0.9° X 30° Fan (nominal)
Range 0.5 - 100 Metres typical; 150 Metres obtainable
Range Resolution ≥ 19 mm (@ 1500m/sec speed of sound, 25 Fs transmit pulse)
Sampling Resolution ≥ 2.5 mm
Scan Angle 360° continuous
Mechanical Step Size $\geq 0.225^\circ$
Scan Speed nom 15 sec/360° @ 10 m and 1.8° step size
nom 41 sec/360° @ 100m and 1.8° step size
Transmit Pulse Lengths 25 - 2500 Fs
Transmit Power OFF, 50 W nom, 500 W nom
Receiver Bandwidth 12/100 kHz
TVG Control -20 to +100 dB
Telemetry RS 485/RS 232 auto switching asynchronous serial data
Telemetry Rates Downlink: 9600 Baud
Uplink selectable: 230K, 115K, 57K, 38K, 19K, 9600 bits/sec
automatic (to suit cable telemetry)
Power Requirements 33W, 22 - 60VDC
Temperature Ranges -10 to +40° C operating
-30 to +40° storage
Operating Depth 3000 meters
Connector Seacon RMG-4-BCL (optional connectors; inquire to factory)
Materials Aluminum 6061-T6, 300-Series SS
Dimensions Diameter 3.5"/89 mm
Length 19.7"/501 mm
Transducer width 5.5"/140 mm
Weight In air 13.0 lbs/5.9 kg
In water 6.5 lbs/2.9 kg

Tripod specifications:

Sonar mount must be gimbal mounted to accept sonar head. Must be easily disassembled and assembled with quick release clips. Must be made of light weight, high strength material with alignment mark on top of tripod. Material must be compatible with salt water.

Training Program: Please list your training program that you offer. Include pricing if there are charges associated with training. Include where training is provided

If you are bidding on an equivalent system, you must attach specification sheets, printed literature, price lists, etc. List any item in the your specifications that is different than the specifications that are contained in this bid document.

On your Bid please include freight costs to:

Utah Highway Patrol
10420 North Jordanelle Blvd.
Heber City, UT 84032

Also provide your shipping information as listed in the freight section of the bid document.

